TITLE V APPLICATION REVIEW

Vegetable Oil Refining Operation

Facility #: C-1555 Proc. Engineer: Brian J. Johnson

Date Deemed Complete: 01/31/97

Facility Name: J.G. Boswell Co. **Mailing Address:** P.O. Box 457

Corcoran, CA 93212-0457

Contact Person: Dennis C. Tristao

Phone: (209) 992-2141

Responsible Official: Dennis C. Tristao

Title: Environmental Compliance Manager

Phone: (209) 992-2141

I. PROPOSAL

J.G. Boswell Co. is proposing that an initial Title V permit be issued for its existing vegetable oil refining facility located in Corcoran, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

II. FACILITY LOCATION

The J.G. Boswell Co. operation is located at 710 Bainum Avenue in Corcoran, California.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories which describe the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

IV. MODEL GENERAL PERMIT TEMPLATE USAGE

The applicant has requested to utilize template No. SJV-BSG-8-0, <u>Steam Generators and Process Heaters</u>, for a 34.8 MMBtu/hr boiler (C-1555-11-0). Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

V. SCOPE OF EPA AND PUBLIC REVIEW

Segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA and Public review:

Conditions 1-23 of the requirements for permit unit C-1555-11-1.

VI. APPLICABLE REQUIREMENTS ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES

Kings County Rule 108 - Source Sampling¹

Kings County Rule 407 - Sulfur Compounds¹

District Rule 2520, 9.4.2 and 9.5.2 - Periodic Monitoring and Recordkeeping¹

<u>District Rule 4201 - Particulate Matter Concentration</u>¹

<u>District Rule 4301 - Fuel Burning Equipment</u>¹

40 CFR 60.40c Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units¹

¹ Model General Permit Template SJV-BSG-8-0 addressed this requirement only for permit unit C-1555-11-1

40 CFR 60.7(b), (c), (d), (e) and (f), 60.8, 60.11 and 60.13 - General Provisions - Excess Emission Reports, Conducting Performance Tests, Continuous Emission Monitor Requirements¹

40 CFR 72.6 (b) - Acid Rain Provisions¹

District Rule 1081 - Source Sampling¹

<u>District Rule 4305 Sec. 4.2, 5.1, 6.1.1, 6.2 (excepting 6.2.3²), 6.3, 8.1 - Boilers, Steam Generators, and Process Heaters¹</u>

District Rule 4351 Sec 4.2, 5.2.2, 6.1.1, 6.2 (excepting 6.2.3¹), 8.1 - Boilers, Steam Generators, and Process Heaters - Reasonably Available Control Technology¹

VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES

<u>District Rule 1100 - Equipment Breakdown</u> (Last Amended 12/17/92)

District Rule 1160 - Emission Statements (Adopted 11/18/92)

<u>District Rule 2010 - Permits Required</u> (Last Amended 12/17/92)

District Rule 2020 - Exemptions (Last Amended 12/21/94)

District Rule 2031 - Transfer of Permits (Last Amended 12/17/92)

<u>District Rule 2040 - Applications</u> (Last Amended 12/17/92)

District Rule 2070 - Standards for Granting Applications (Last Amended 12/17/92)

District Rule 2080 - Conditional Approval (Last Amended 12/17/92)

<u>District Rule 2520 - Federally Mandated Operating Permits, Sections 5.2, 9.4.2, 9.5.1, 9.5.2, 9.6.1, 9.6.2, 9.8, 9.9.1, 9.9.2, 9.9.3, 9.9.4, 9.9.5, 9.10, 9.13.1, 9.14.1, 9.14.2, 9.17, and 10.0</u> (Adopted 06/15/95)³

District Rule 4101 - Visible Emissions (Last Amended 12/17/92)

¹ Model General Permit Template SJV-BSG-8-0 addressed these requirements only for permit unit C-1555-11-1

² CO requirements that are not federally enforceable until the rule is approved into the SIP

³ These requirements are addressed outside the Model General Template for permit units C-1555-0-1, 2-3, 3-4, 6-4, 7-5, and 8-3.

District Rule 4601 - Architectural Coatings (Last Amended 12/17/92)

<u>District Rule 8020, 8030, and 8060 - Fugitive Dust (PM₁₀) Emissions</u> (Last Amended 4/25/96)

40 CFR Part 82 - Subpart F, Stratospheric Ozone

40 CFR Part 61 - Subpart M, National Emission Standard for Asbestos

<u>District New and Modified Stationary Source Review Rule</u> (Last Amended 6/15/95)

District Rule 4201 - Particulate Matter Concentration (Last Amended 12/17/92)¹

District Rule 4202 - Particulate Matter Emission Rate (Last Amended 12/17/92)

District Rule 4623 - Storage of Organic Liquids (Last Amended 12/17/92)

<u>District Rule 4691 - Vegetable Oil Processing</u> (Last Amended 12/17/92)

Kings County APCD Rule 410 - Organic Solvents

40 CFR Part 68 - Chemical Accident Prevention Provisions (Adopted 1/31/94)

VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Operating Permit are designated as Federally Enforceable Through Title V Permit.

Condition 41 of the facility-wide requirements (C-1555-0-1) is not federally enforceable through the Title V permit.

IX. COMPLIANCE

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¹ These requirements are addressed outside the Model General Permit Template for permit units C-1555-2-3, 3-4, 6-4, 7-5, and 8-3.

A. Requirements Addressed by Model General Permit Templates

The applicant is proposing to use model permit template SJV-BSG-8-0 to address federally applicable requirements for a 34.8 MMBtu/hr boiler (C-1555-11-0). Section IV of the template includes a demonstration of compliance for all generally applicable requirements. Template conditions have been added to the requirements for permit unit C-1555-11-1 as conditions 1-3 and 5-23 to ensure compliance with these requirements.

B. Requirements not Addressed by Model General Permit Templates

1. District Rule 1100

Sections 6.0 and 7.0 set forth breakdown procedures and reporting requirements. These requirements are addressed by conditions 1, 2 and 11 of the facility-wide requirements (C-1555-0-1). District Rule 1100 has been submitted to the EPA to replace each of the county rules in the SIP: rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); 111 (Kern, Tulare, Kings). District Rule 1100 is at least as stringent as the county SIP rules addressing breakdowns.

Table 1. Comparison of District Rule 1100 and Kings County Rule 111

Requirement	District	KCAPC D
Report breakdown occurrence as soon as reasonably possible but no later than 1 hour after detection	X	Х
Obtain variance if occurrence will last longer than a production run or 24 hours whichever is shorter (96 hours for CEM systems)	Х	X
Submit a report to the APCO within 10 days of the correction of the breakdown occurrence which includes the following: 1) a statement that the breakdown condition has been corrected, and the date of correction and proof of compliance, 2) a specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the APCO to determine whether the occurrence was a breakdown condition, 3) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future, and 4) pictures of the equipment or controls which failed if available.	X	X

2. District Rule 1160

Section 5.0 requires the owner or operator of any stationary source to provide the District with a written emission statement showing actual emissions of reactive organic gases (ROG's) and nitrogen oxides (NO_x) from that source. The District waives this requirement for sources emitting less than 25 tons per year of these pollutants if the District provides the Air Resources Board (ARB) with an emission inventory of sources emitting greater than 10 tons per year of NO_x or ROG's based on the use of emission factors acceptable to the ARB. See condition 3 of the facility-wide requirements (C-1555-0-1).

3. District Rules 2010 and 2020

District Rule 2010 sections 3.0 and 4.0 require any person building, modifying or replacing any operation that may cause the issuance of air contaminants to apply for an Authority to Construct (ATC) from the District in advance. The ATC will remain in effect until the Permit to Operate (PTO) is granted. District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. These requirements are stated in condition 4 of the facility-wide requirements (C-1555-0-1).

District Rule 2010 has been submitted to the EPA to replace each of the county rules in the SIP: Rule 201 (in all eight counties in the San Joaquin Valley). District Rule 2010 is the same as the county rules in the SIP that address requirements for a permit.

Table 2. Comparison of District Rule 2010 and Kings County Rule 201

Requirement	District	KCAPCD
Any person building or replacing equipment must apply for an Authority to Construct.	X	Х
Any person altering equipment must apply for an Authority to Construct.	X	
Before operation, a Permit to Operate must be obtained.	X	X
A Permit to Operate must be posted on the equipment.	Χ	X
A person shall not willfully deface, alter, forge, counterfeit, or falsify a Permit to Operate.	X	Х
The Authority to Construct shall serve as a temporary Permit to Operate for newly constructed or modified sources. The application for a Permit to Operate shall serve as a temporary Permit to Operate for existing sources that apply for a Permit to Operate.	X	

4. District Rules 2031, 2070 and 2080

These rules set forth requirements to comply with all conditions of the Permit to Operate. Permits to Operate or Authorities to Construct are not transferable unless a new application is filed with and approved by the District. All source operations must be constructed and operated as specified in the Authority to Construct. See conditions 5 and 6 of the facility-wide requirements (C-1555-0-1).

Table 3. Comparison of District Rule 2031 and Kings County Rule 203.1

Requirement	District	KCAPC D
A PTO or an ATC shall not be transferable from location to location or from person to person unless a new application is filed and approved by the APCO.	Х	Х

Table 4. Comparison of District Rule 2070 and Kings County Rule 207

Requirement	District	KCAPC D
ATC or PTO applications shall be denied unless the applicant shows that Health and Safety Codes Section 41700, 41701, or 42301 are not violated.	Х	
ATC or PTO applications shall be denied unless the applicant shows that Health and Safety Codes Section 41700 or 41701 are not violated.	Х	Х
PTO applications shall be denied unless the applicant follows the ATC.	Χ	X
ATC or PTO applications shall be denied unless the applicant complies with Rule 2201.	Χ	
ATC or PTO applications shall be denied unless the applicant will comply with both NSPS and NESHAP requirements.	Х	
A person shall not operate any source operation contrary to conditions specified on the Permit to Operate.	Χ	

Table 5. Comparison of District Rule 2080 and Kings County Rule 209

Requirement	District	KCAPC D
The APCO may issue an ATC or PTO subject to conditions that shall be specified in writing.	X	Х

5. District Rule 2040

Section 3.0 requires that every application for a permit shall be filed in a manner and form prescribed by the District. See condition 7 of the facility-wide requirements (C-1555-0-1).

Table 6. Comparison of District Rule 2040 and Kings County Rule 204

Requirement	District	KCAPC D
Every application for a permit shall be filed in the manner and form prescribed by the APCO and shall give all the information necessary to enable the APCO to determine whether to grant or deny a permit.	X	Х
The APCO shall notify the applicant in writing in the event of a denial. The applicant may deem the Permit to Operate denied if the APCO fails to act on the PTO within 60 calendar days after filing. The applicant may petition the Hearing Board in writing for a public hearing in the event of an application denial.	X	

6. District Rule 2520

Section 5.2 requires that permittees submit applications for Operating Permit renewal at least six months prior to permit expiration. Condition 36 of the facility-wide requirements (C-1555-0-1) ensures compliance with this requirement.

Section 9.0 of District Rule 2520 requires certain elements to be contained in each Operating Permit:

Section 9.4.2 requires that periodic monitoring and/or recordkeeping be performed if none is associated with a given emission limit to ensure compliance. Periodic monitoring and recordkeeping consisting of the retention of daily reports of process throughput rate and of maintenance records will be supported by conditions 5, 7, 8, and 10 of the requirements for permit unit C-1555-2-3, conditions 5, 6, 8, and 9 of the requirements for permit unit C-1555-3-4, conditions 6, 9, and 11 of the requirements for permit unit C-1555-6-4, conditions 6, 9, 10, and 12 of the requirements for permit unit 7-5, and conditions 5, 13, 14, and 16-18 of the requirements for permit unit C-1555-8-3.

Sections 9.5.1 and 9.5.2 contains requirements to incorporate all applicable recordkeeping requirements into the Operating Permit, specific records of any required monitoring, and the retention of all required monitoring data and support information for five years. The requirements to keep specific monitoring records and retain records for five years are stated in conditions 8 and 9 of the facility-wide requirements (C-1555-0-1), respectively.

Section 9.6 contains requirements for the submittal of reports of monitoring at least every six months and prompt reporting of deviations from permitting requirements, including those attributable to upset conditions. The responsible official must certify all required reports. These requirements are stated in conditions 10 and 11 of the facility-wide requirements (C-1555-0-1).

Section 9.8 states that the Operating Permit must also contain a severability clause in case of a court challenge; the clause is stated in condition 12 of the facility-wide requirements (C-1555-0-1).

Section 9.9 contains requirements for provisions in the Operating Permit stating: 1) that the permittee must comply with all permit conditions; 2) that the permitted activity would have to be reduced to comply with the permit conditions should not be a defense in an enforcement action, 3) that the permit may be revoked, modified, reissued, or reopened for cause, 4) that the Operating Permit does not reflect any property rights, and 5) that the permittee will furnish the District with any requested information to determine compliance with the conditions of the Operating Permit. Compliance with these sections of Rule 2520 will be ensured by conditions 5 and 13-16 of the facility-wide requirements (C-1555-0-1).

Section 9.10 contains the requirement to provide in the permit that the permittee pay annual permit fees and applicable fees from District Rules 3010, 3030, 3050, 3080, 3090, 3110, and 3120. This requirement is stated in condition 17 of the facility-wide requirements (C-1555-0-1).

Section 9.14.1 requires any report or document submitted under a permit requirement or a request for information by the District or EPA shall contain a certification by a responsible official to truth, accuracy, and completeness. Compliance with this section will be ensured by condition 28 of the facility-wide requirements (C-1555-0-1).

Section 9.14.2 contains inspection and entry requirements that allows an authorized representative of the District to enter a permittee's premises to inspect equipment, operations, work practices, permits on file, and to sample substances or monitor parameters for the purpose of assuring compliance with the permit requirements. Compliance with this section will be ensured by conditions 18, 19, 20 and 21 of the facility-wide requirements (C-1555-0-1).

Section 9.17 requires that the permittee submit certification of compliance with the terms and standards of Operating Permits to the

EPA and the District annually (or more frequently as required by the applicable requirement or the District). Condition 35 of the facility-wide requirements (C-1555-0-1) ensures compliance with this requirement.

Section 10.0 requires any application form, report, or compliance certification submitted pursuant to these regulations shall contain certification of truth accuracy, and completeness by a responsible official. Compliance with this section will be ensured by condition 28 of the facility-wide requirements (C-1555-0-1).

7. District Rule 4101

District Rule 4101 has been submitted to the EPA to replace Rule 401 (all counties of the District). EPA made a preliminary determination that District Rule 4101 is "more stringent" than the county versions previously referenced, per correspondence dated August 20, 1996.

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than 20% opacity. This requirement is stated in condition 22 of the facility-wide requirements (C-1555-0-1).

8. District Rule 4601

This rule limits the emissions of VOC's from architectural coatings. It requires limiting the application of coating to no more than 250 grams of VOC/liter of coating (less water and exempt compounds). It also forbids the use of coating from the list in the Table of Standards (section 5.2) and limits the use of Specialty Coatings to a VOC content not to exceed the specified limits in Table 1 of Rule 4601. This rule further specifies labeling requirements, coatings thinning recommendations, storage requirements and cleanup requirements. See conditions 23, 24, 25, 26 and 27 of the facility-wide requirements (C-1555-0-1).

9. District Regulation VIII - Fugitive Dust (PM10)

These regulations contain requirements for the control of fugitive dust. These requirements apply to various sources: construction, demolition, excavation, extraction, and water mining activities; outdoor storage piles; paved and unpaved roads. Compliance with these regulations will be required by conditions 31, 32 and 33 of the facility-wide requirements (C-1555-0-1).

10. 40 CFR Part 61.145, 61.150 - National Emissions Standards for Asbestos

There are applicable requirements from the National Emissions Standards for Hazardous Air Pollutants that apply to all sources in general. These requirements pertain to asbestos removal and disposal from renovated or demolished structures. Compliance is ensured for these requirements by condition 34 of the facility-wide requirements (C-1555-0-1).

11. 40 CFR Part 82, Subpart F - Stratospheric Ozone

There are applicable requirements from Title VI of the CAA (Stratospheric Ozone) that apply to all sources in general. These requirements pertain to air conditioners, chillers and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC). These requirements are addressed in conditions 29 and 30 of the facility-wide requirements (C-1555-0-1).

12. District New and Modified Stationary Source Review Rule

Basing Operating Permit NSR requirements on the current District PTO conditions is allowed through section 7 of EPA's White Paper for the Streamlined Development of Part 70 Permit Applications. Therefore, all federally enforceable NSR requirements shall be taken from the current PTO conditions.

- a. Decortication Operation (C-1555-2-3)
 - Condition 1 from the PTO was included as condition 41 of the facility-wide requirements (C-1555-0-1). This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
 - Condition 2 from the PTO is redundant with condition 22 of the facility-wide requirements (C-1555-0-1). Both conditions required an opacity limit of 20% or Ringelmann 1.

- Condition 3 from the PTO was included as condition 1 of the requirements for permit unit C-1555-2-3.
- Condition 4 from the PTO was included as condition 2 of the requirements for permit unit C-1555-2-3.
- Condition 5 from the PTO was included as condition 3 of the requirements for permit unit C-1555-2-3.
- Condition 6 from the PTO was included as condition 4 of the requirements for permit unit C-1555-2-3.
- Condition 7 from the PTO requires daily records of the tons of seed processed, the maintenance of records for five years, and for records to be made available for inspection. These requirements have been separated are now enforced by condition 5 of the requirements for permit unit C-1555-2-3, and conditions 9 and 18-21 of the facility-wide requirements (C-1555-0-1).

b. Lint Removal Process (C-1555-3-4)

This unit was originally granted a Permit to Operate in 1974 prior to any NSR requirements. No NSR modifications have been made, therefore this unit has no NSR conditions. Since no District NSR permit was issued, the only federally enforceable requirements will be from District Prohibitory Rules that have been adopted into the SIP.

c. Meal Handling Plant (C-1555-6-4)

- Condition 1 from the PTO was included as condition 1 of the requirements for permit unit C-1555-6-4.
- Condition 2 from the PTO was included as condition 2 of the requirements for permit unit C-1555-6-4.
- Condition 3 from the PTO is redundant with condition 22 of the facility-wide requirements (C-1555-0-1). Both conditions required an opacity limit of 20% or Ringelmann 1. Therefore condition 3 from the ATC was not added to the requirements for permit unit C-1555-6-4.
- Condition 4 from the PTO was included as condition 3 of the requirements for permit unit C-1555-6-4.
- Condition 5 from the PTO was included as condition 4 of the requirements for permit unit C-1555-6-4.
- Condition 6 from the PTO was included as condition 5 of the requirements for permit unit C-1555-6-4.
- Condition 7 from the PTO requires daily records of the throughput of meal, the maintenance of records for five years, and for records to be made available for inspection. These

requirements have been separated are now enforced by condition 6 of the requirements for permit unit C-1555-6-4, and conditions 9 and 18-21 of the facility-wide requirements (C-1555-0-1).

d. Flaking Plant (C-1555-7-5)

- Condition 1 from the PTO was included as condition 1 of the requirements for permit unit C-1555-7-5.
- Condition 2 from the PTO is redundant with condition 22 of the facility-wide requirements (C-1555-0-1). Both conditions required an opacity limit of 20% or Ringelmann 1. Therefore condition 2 from the ATC was not added to the requirements for permit unit C-1555-7-5.
- Condition 3 from the PTO was included as condition 2 of the requirements for permit unit C-1555-7-5. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 4 from the PTO was included as condition 41 of the facility-wide requirements (C-1555-0-1). This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 5 from the PTO was included as condition 3 of the requirements for permit unit C-1555-7-5.
- Condition 6 from the PTO was included as condition 4 of the requirements for permit unit C-1555-7-5.
- Condition 7 from the PTO was included as condition 5 of the requirements for permit unit C-1555-7-5.
- Condition 8 from the PTO requires daily records of the throughput of conditioned seeds, the maintenance of records for five years, and for records to be made available for inspection. These requirements have been separated are now enforced by condition 6 of the requirements for permit unit C-1555-7-5, and conditions 9 and 18-21 of the facility-wide requirements (C-1555-0-1).
- Condition 9 from the PTO was included as condition 7 of the requirements for permit unit C-1555-7-5.

e. Vegetable Oil Solvent Refinery (C-1555-8-3)

• Condition 1 from the PTO was included as condition 1 of the requirements for permit unit C-1555-8-3.

- Condition 2 from the PTO is redundant with condition 22 of the facility-wide requirements (C-1555-0-1). Both conditions required an opacity limit of 20% or Ringelmann 1. Therefore condition 2 from the ATC was not added to the requirements for permit unit C-1555-8-3.
- Condition 3 from the PTO was included as condition 2 of the requirements for permit unit C-1555-8-3.
- Condition 4 from the PTO was included as condition 3 of the requirements for permit unit C-1555-8-3.
- Condition 5 from the PTO was included as condition 4 of the requirements for permit unit C-1555-8-3.
- Condition 6 from the PTO required records of the vegetable oil seed processing rates and hexane consumption, the maintenance of records for five years, and for records to be made available for inspection. These requirements have been separated are now enforced by condition 5 of the requirements for permit unit C-1555-8-2, and conditions 9 and 18-21 of the facility-wide requirements (C-1555-0-1).
- Condition 7 from the PTO was included as condition 6 of the requirements for permit unit C-1555-8-3.
- f. 34.8 MMBtu/hr Superior Seminole Boiler (C-1555-11-1)
 - Condition 1 from the PTO was included as condition 41 of the facility-wide requirements (C-1555-0-1). This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
 - Condition 2 from the PTO is enforced by condition 1 of the requirements for permit unit C-1555-11-1.
 - Condition 3 from the PTO is redundant with condition 22 of the facility-wide requirements (C-1555-0-1). Both conditions required an opacity limit of 20% or Ringelmann 1. Therefore condition 3 from the PTO was not added to the requirements for permit unit C-1555-11-1.
 - Condition 4 from the PTO required an analysis showing the sulfur and nitrogen content of fuel oil, the maintenance of records for two years, and for records to be made available for inspection. These requirements have been separated are now enforced by conditions 9-11 of the requirement for permit unit C-1555-11-1 and conditions 18-21 of the facility-wide requirements (C-1555-0-1).
 - Condition 5 from the PTO was included as condition 24 of the requirements for permit unit C-1555-11-1.

- Condition 6 from the PTO was included as condition 25 of the requirements for permit unit C-1555-11-1.
- Condition 7 from the PTO was included as condition 26 of the requirements for permit unit C-1555-11-1.
- Condition 8 from the PTO was included as condition 27 of the requirements for permit unit C-1555-11-1.
- Condition 9 from the PTO was included as condition 28 of the requirements for permit unit C-1555-11-1.
- Condition 10 from the PTO limited NO_x emission to 30 ppmv @3% O_2 . The condition is now enforced by conditions 3 and 15 of the requirements for permit unit C-1555-11-1.
- Condition 11 from the PTO was included as condition 29 of the requirements for permit unit C-1555-11-1.
- Condition 12 from the PTO requires that records be kept of daily fuel oil use and monthly natural gas use. This condition is now enforced by condition 30 of the requirements for permit unit C-1555-11-1 and condition 19 of the facility-wide requirements (C-1555-0-1).

13. District Rule 4201 - Particulate Matter Concentration

Section 3.1 requires that a source not discharge dust, fumes, or total suspended particulate matter emission in excess of 0.1 gr./dscf.

a. Permit Units C-1555-2-3, 3-4, 6-4, 7-5, and 8-3

Source test data has been submitted to the District by the facility that indicates that emission points from these permit units will be below the allowable limit. The source tests, conducted by BTC Environmental on April 30 through May 1, 1990, are summarized in Attachment D. The emission rates were found to be much less than the permitted limit. Additionally, the physical nature of the particulate removal process employed by cyclones has a very consistent removal efficiency. Therefore, no additional monitoring, recordkeeping, or reporting requirements will be added to the current permit units. These units are expected to be in compliance.

14. District Rule 4202 - Particulate Matter Emission Rate

This rule applies to any source operation that emits particulate matter. Rule 4202 contains the same requirements as KCAPCD Rule 405 as is shown in the following table. The compliance demonstration that follows the table, demonstrates compliance for both District Rule 4202 and KCAPCD Rule 405.

Table 8. Comparison of District Rule 4202 and Kings County Rule 405

Requirement	District	KCAPCD
A person shall not discharge into the atmosphere particulate matter in excess of an exponential equation that is defined in each of the rules. The equation is identical for each of the rules.	Х	Х

The maximum allowable emission rate is given as a function of the process weight rate in section 4 of Rule 4202. The function is shown below.

For process rates up to 60,000 lbs/hour:

$$E = 3.59P^{0.62}$$

For process rates greater 60,000 lbs/hour:

$$E = 17.31P^{0.16}$$

where: E = emission rate of particulate matter (lb/hr)
P = process weight rate (ton/hr)

a. Decortication Process (C-1555-2-3)

The maximum process rate for this unit is 33.33 tons per hour. Therefore, the allowable emissions are:

$$E = 17.31*(33.33 \text{ ton/hr})^{0.16} = 30.34 \text{ lb/hour}$$

The actual emissions are calculated using emission factors from source tests, conducted by BTC Environmental on April 30 through May 1, 1990. The results are summarized in Attachment D.

E = 33.33 ton/hour * 0.0392 lbs PM/ton = 1.31 lbs PM/hour

The physical nature of the particulate removal process employed by cyclones has a very consistent removal efficiency. Therefore, no additional monitoring, recordkeeping, or reporting requirements will be added to the current permit unit. This unit is expected to be in compliance.

b. Lint Removal Process (C-1555-3-4)

The average 1995 process throughput was 16.81 tons seed/hour. Therefore, the allowable emissions are:

$$E = 3.59 * (16.81 ton/hour)^{0.62} = 20.65 lb/hour$$

The actual emissions are calculated using emission factors from <u>Derivation & Substantiation of Emission Factors for 1991</u>
<u>Biannual Toxic Emission Inventory Report</u>, Table 1, WZI Inc., 1993.

$$E = 1.09 lb PM/ton * 16.81 ton/hour = 18.3 lb/hr$$

The physical nature of the particulate removal process employed by cyclones has a very consistent removal efficiency. Therefore, no additional monitoring, recordkeeping, or reporting requirements will be added to the current permit unit. This unit is expected to be in compliance.

c. Meal Handling Plant (C-1555-6-4)

The maximum process rate is 58.33 tons/hour. Therefore, the allowable emissions are:

$$E = 17.31 * (58.33)^{0.16} = 33.18 lb/hr$$

The actual emissions are calculated using emission factors from Derivation & Substantiation of Emission Factors for 1991 Biannual Toxic Emission Inventory Report, Table 1, WZI Inc., 1993.

$$E = 0.00807$$
 lb PM/ton * 58.33 ton/hour = 0.47 lb/hr

The emission rates were found to be much less than the permitted limit, therefore no additional monitoring, recordkeeping, or reporting requirements will be added to the current permit units. This permit unit is expected to be in compliance.

d. Flaking Plant (C-1555-7-5)

The maximum process rate is 58.33 tons/hour. Therefore, the allowable emissions are:

$$E = 17.31 * (58.33)^{0.16} = 33.18 lb/hr$$

The actual emissions are calculated using emission factors from Derivation & Substantiation of Emission Factors for 1991

<u>Biannual Toxic Emission Inventory Report,</u> Table 1, WZI Inc., 1993.

E = 0.00482 lb PM/ton * 58.33 ton/hour = 0.28 lb/hr

The emission rates were found to be much less than the permitted limit and the physical nature of the particulate removal process employed by cyclones has a very consistent removal efficiency. Therefore, no additional monitoring, recordkeeping, or reporting requirements will be added to the current permit unit. This unit is expected to be in compliance.

e. Vegetable Oil Solvent Refinery (C-1555-8-3)

The maximum process rate is 58.33 tons/hour. Therefore, the allowable emissions are:

$$E = 17.31 * (58.33)^{0.16} = 33.18 lb/hr$$

The actual emissions are limited by Operating Permit C-1555-8-3 condition 3, which set a limit of 1.5 lb PM/hr. The emission rates were found to be much less than the permitted limit and the physical nature of the particulate removal process employed by cyclones has a very consistent removal efficiency. This unit is expected to be in compliance.

15. District Rule 4623

The purpose of this rule is to limit VOC emissions from the storage of organic liquids. Section 4.1 provides an exemption from the requirements of this rule for tanks, reservoirs or other containers which are pressure vessels maintaining working pressures sufficient at all times to prevent organic liquid loss to the atmosphere. Therefore, the existing organic storage equipment at the facility is exempt. See condition 40 of the facility-wide requirements (C-1555-0-1).

16. District Rule 4691 - Vegetable Oil Processing Operations

The purpose of this rule is to limit VOC emissions from vegetable oil processing operations and to provide the administrative requirements for recording and measuring emissions.

Section 5 lists the operational requirements of the plant and the equipment. This section includes a capture and control requirement

for extractors, desolventizer-toasters, and coolers or tumblers. It also establishes leak inspection and detection procedures for all other equipment in organic service. Manufacturer's information provided by the applicant indicates a control efficiency greater than that required. Compliance is enforced by conditions 6-14 of the requirements for permit unit C-1555-8-3.

Section 6 details the administrative requirements including recordkeeping and test methods. Compliance is enforced by condition 5 of the requirements for permit unit C-1555-8-3.

Section 7 contains the compliance schedule for applicable facilities. This facility has already met the now expired compliance date. Therefore, no additional requirement is necessary.

17. Kings County APCD Rule 410 - Organic Solvents

This rule requires an operation, which emits more than 15 lbs per day of VOC's, to employ a control device that captures at least 85% of the controllable emissions. It also mandates a 90% destruction of all captured VOC's.

Manufacturer's information provided by the applicant indicates a control efficiency greater than that required by this rule. Permit conditions have been be added to ensure compliance with the control limits and all other applicable requirements of this rule. See conditions 6 and 7 of the requirements for permit unit C-1555-8-3.

18. 40 CFR Part 68 - Chemical Accident Prevention Provisions

The requirements of this provision mandates that the subject facility submit to the proper authority a Risk Management Plan. Permit Condition 42 of the facility-wide requirements (C-1555-0-1) requires compliance with this provision.

X. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Operating Permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

A. Requirements Addressed by Model General Permit Templates

For permit unit C-1555-11-0, the applicant has completed and signed a TQF for District Template SJV-BSG-8-0. By using the model general permit template, the applicant has requested that a permit shield be issued for all of the federally enforceable requirements addressed within the template. The basis for this permit shield is discussed in section IV of the Template. This permit shield is included in conditions 18-23 of the requirements for permit unit C-1555-11-1.

B. Requirements not Addressed by Model General Permit Templates

The applicant is requesting a permit shield for each of the requirements listed below:

1. District Rule 1100, 6.1 and 7.0

Compliance with these requirements was addressed in Section IX of this document, and is ensured by conditions 1 and 2 of the facility-wide requirements (C-1555-0-1). Therefore, a permit shield is being granted for these requirements in condition 39.

2. District Rule 2010, 3.0 and 4.0

Compliance with these requirements was addressed in Section IX of this document, and is ensured by condition 4 of the facility-wide requirements (C-1555-0-1). Therefore, a permit shield is being granted for these requirements in condition 39.

3. District Rule 2031; 2070, 7.0; and 2080

Compliance with these requirements was addressed in Section IX of this document, and is ensured by conditions 5 and 6 of the facility-wide requirements (C-1555-0-1). Therefore, a permit shield is being granted for these requirements in condition 39.

4. District Rule 2040

Compliance with these requirements was addressed in Section IX of this document, and is ensured by condition 7 of the facility-wide requirements (C-1555-0-1). Therefore, a permit shield is being granted for these requirements in condition 39.

5. District Rule 4101

Compliance with these requirements was addressed in Section IX of this document, and is ensured by condition 22 of the facility-wide requirements (C-1555-0-1). Therefore, a permit shield is being granted for these requirements in condition 39.

6. District Rule 4601, 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2

Compliance with these requirements was addressed in Section IX of this document, and is ensured by conditions 23, 24, 25, 26, and 27 of the facility-wide requirements (C-1555-0-1). Therefore, a permit shield is being granted for these requirements in condition 39.

7. District Rule 8020, 8030, and 8060

Compliance with these requirements was addressed in Section IX of this document, and is ensured by conditions 31, 32, and 33 of the facility-wide requirements (C-1555-0-1). Therefore, a permit shield is being granted for these requirements in condition 39.

8. District Rule 4201

Compliance with this requirement was addressed in Section IX of this document, and has been ensured by source testing performed by the facility. Therefore, a permit shield is being granted for this requirement in condition 7 of the requirements for permit unit C-1555-2-3 and 6-4, condition 3 of the requirements for permit unit C-1555-3-4, condition 8 of the requirements for permit unit C-1555-7-5, and condition 15 of the requirements for permit unit C-1555-8-3.

9. District Rule 4202

Compliance with this requirement was addressed in Section IX of this document, and has been ensured by condition 3 of the requirements for permit unit C-1555-2-3, condition 5 of the requirements for permit unit C-1555-6-4, condition 7 of the

requirements for permit unit C-1555-7-5, condition 3 of the requirements for permit unit C-1555-8-3. Therefore, a permit shield is being granted for this requirement in condition 7 of the requirements for permit unit C-1555-2-3 and 6-4, condition 8 of the requirements for permit unit C-1555-7-5, and condition 15 of the requirements for permit unit C-1555-8-3.

10. District Rule 4623

Compliance with this requirement was addressed in Section IX of this document. A permit shield shall be granted for this requirement while the storage of organic liquids at this facility meet the provisions of the exemption. See condition 40 of the facility-wide requirements.

11. District Rule 4691

Compliance with this requirement was addressed in Section IX of this document, and is ensured by conditions 5-17 of the requirements for permit unit C-1555-8-3. Therefore, a permit shield is being granted for these requirements in condition 15.

XI. PERMIT CONDITIONS

See draft permits beginning on the next page.

XII. EPA AND PUBLIC COMMENTS

See Attachment E.